**Serotherapy in Scarlet Fever.**—Koch (*Münch. med. Woch.*, 1913, lx, 2611) writes concerning the treatment of scarlet fever patients by injections of serum derived from the blood of convalescents from scarlet fever. A mixed serum from the blood of a number of scarlet fever convalescents, free from tuberculous or luetic disease is used preferably to a serum obtained from an individual case. In 1912, Reiss and Jungmann reported 12 cases of scarlet fever treated with good results by this method and Koch adds 28 more cases in this article. Of this series, 1 patient died, but this patient was practically moribund on admission to the hospital and died one hour after the first injection. The effects of the treatment were most striking in the severe toxic cases without complications. Koch gives temperature charts in his article that seem to show the prompt action of the serum treatment upon the temperature curve. He says that this effect was parallel with marked clinical improvement in the individual cases.

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**The Intrameningeal Treatment of Tabes Dorsalis and Cerebrospinal Syphilis.**—Boggs and Snowden (*Jour. Amer. Med. Assoc.*, 1913, lxi, 2268) report concerning the treatment of tabes dorsalis and cerebrospinal syphilis by the intraspinal injection of serum removed one hour after the intravenous injection of salvarsan or neosalvarsan. The Swift and Ellis technique was followed, except that they injected larger doses of the undiluted serum. Blood was withdrawn one hour after the intravenous administration of salvarsan and allowed to clot. The next day the serum was removed, centrifugalized, and heated at 56° C. for half an hour. Lumbar puncture was then done, cerebrospinal fluid withdrawn, and exactly enough serum injected to replace the fluid. The amounts varied between 20 and 35 c.c., and the treatment was repeated from every ten to twenty days until the spinal fluid was normal in respect to the cell-count and Wassermann. In every case there was marked improvement, the cell-count dropping to normal and the Wassermann becoming less marked and in most of the cases entirely negative. The most constant result was the disappearance of the lightning pains and other sensory disturbances, and this resulted in a more cheerful mental attitude and a corresponding improvement in the appetite and nutrition. The effect on locomotion was slower in development and less marked, but definite, and in some cases great improvement was achieved, rather more pronounced, apparently, than in patients treated by smaller doses of diluted serum.

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**The Benzol Treatment of Leukemia.**—Mühlmann (*Deutsch. med. Woch.*, 1913, xxxix, 2083) reports a case of lymphatic leukemia treated with benzol during a period of nearly six months with a final fatal result. This patient had received a total of 175 gm. of benzol during this time and at the autopsy extensive necrosis of the liver was found. The patient showed marked improvement after the first three or four weeks of benzol treatment and continued to improve for two weeks after the discontinuance of the remedy. This period of improvement was closely followed by a relapse which yielded to further benzol treatment, the leukocytes dropping from 60,000 to 20,000. This temporary improvement was followed by a severe relapse while on the benzol and the patient rapidly failed. Pappenheim has found necrosis of the liver in rabbits after the administration of benzol for continued periods of time and Neumann has also reported necrosis of the liver in a case of myeloid leukemia treated with benzol. Mühlmann cautions against the continued use of benzol in view of this apparent destructive action of benzol upon the liver.

**The Scientific Basis for Vaccine Therapy.**—PEARCE (*Jour. Amer. Med. Assoc.*, 1913, lxi, 2115) says that prophylactic vaccination rests on a sound scientific basis of experimental study and clinical observation. Curative vaccination has no sound experimental basis, but the application of the general principles of immunity as well as clinical observation offers a plausible basis for the treatment of localized, more or less chronic infections, and of "carriers." On the other hand, no satisfactory basis is at hand for curative vaccination in the acute self-limited diseases characterized by general dissemination and systemic infection. All attempted vaccinations in this group must be considered as purely experimental. The only logical method of vaccination is the use of "autogenous vaccines." Mixed vaccines, commercially prepared, constitute a type of bacterial polypharmacy which should be discouraged as unscientific and non-ethical. Therapeutic vaccination, if it is to be placed on a scientific basis, should be regarded as a method of treatment based on the study of the individual and his infection and not as a ready-made method capable of the universal application of stock vaccines. The use of vaccines in diseases of doubtful or unknown etiology is unscientific and ethically indefensible. Every physician practicing vaccination should bring to bear in the study of his results every method of laboratory and clinical investigation which promises light, and preferably should work with a trained immunologist. Thus only can definite knowledge of the efficacy of vaccination be obtained. It is well to remember the words of A. E. Wright in this connection. Wright asserts that for such skilled service as that demanded by vaccine therapy "is required a man who has spent years of study to master the technique, to know how to make the vaccines, to know where to look for the microbes, to know which are the most important microbes, to know how to isolate them, and, most of all, a man with sufficient experience and ability to apply all these things." In the interpretation of results it should be borne in mind that, as Theobald Smith has emphasized, vaccines rarely, if ever, cure, but act rather in aiding a process which tends to recovery by stimulating a languid process to immunization.

**Splenectomy in Pernicious Anemia.**—MOSSE (*Berlin. klin. Woch.*, 1913, l, 2088) describes a case with blood changes similar to those of pernicious anemia in which an apparent cure followed splenectomy. For this treatment to be successful, Mosse believes that the blood should show evidences of hemolysis. This can be determined by testing the resisting power of the red cells to salt solutions of varying strengths and to the patient's serum and alien sera. It is unusual to find evidence of increased fragility of the red cells in true pernicious anemia, as many observations have shown that the red cells in pernicious anemia are more resistant to hemolysing agents than normal red cells.